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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/650,237	08/28/2003	Sebastian Bierwirth	TRW(AS)6716	6394

7590 05/17/2005

TAROLLI, SUNDHEIM, COVELL, TUMMINO & SZABO L.L.P.  
1111 LEADER BLDG.  
526 SUPERIOR AVENUE  
CLEVELAND, OH 44114-1400

EXAMINER

JOHNSON, STEPHEN

ART UNIT PAPER NUMBER

3641

DATE MAILED: 05/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/650,237

Applicant(s)

BIERWIRTH ET AL.

Examiner

Stephen M. Johnson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 29 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-12, 14-16, 18-30, 32 and 33 is/are pending in the application.
- 4a) Of the above claim(s) 4 and 22 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 7-12, 14, 16 and 18 is/are allowed.
- 6) ☒ Claim(s) 1-3, 5, 6, 19-21, 23 and 24 is/are rejected.
- 7) ☒ Claim(s) 15, 25-30, 32 and 33 is/are objected to.
- 8) ☒ Claim(s) 1-12, 14-16, 18-30, 32 and 33 are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☒ Other: fig. 2 Dinsdale.

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1. Applicant's amendments filed on 4/12/2005 and 4/29/2005 have been entered.

The substitute specification filed on 4/12/2005 has been entered.

2. Applicant's election without traverse of species A (figs. 1-2) in the reply filed on 10/18/2004 is acknowledged.

Claims 4 and 22 are withdrawn from consideration as being directed to non-elected species. Claims 1-3, 5-12, 14-16, 18-21, 23-30, and 32-33 read on the elected species and an action on these claims follows.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-3, 5-6, 19-21, and 23-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dinsdale et al. in view of Rink et al..

Dinsdale et al. disclose a gas generator comprising:

- |   |                |
|---|----------------|
| a) a tubular outer housing;                       | contains 66    |
| b) a combustion chamber inside the outer housing; | 66             |
| c) a charge of propellant (liquid);               | 86             |
| d) at least one igniter unit;                     | 100            |
| e) an igniter;                                    | 104, 106       |
| f) a radial ignition transfer opening; and        | contains 100   |
| g) a distribution space or intermediate space.    | space above 86 |

Dinsdale et al. apply as previously recited. However, undisclosed is a charge of

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propellant that is a solid propellant. Rink et al. teach a charge of propellant that is a solid propellant (see paragraph 0062). Applicant is substituting one type of propellant charge for another in an analogous art setting as explicitly encouraged by the secondary reference (see paragraph 0062 of Rink et al.). It would have been obvious to a person of ordinary skill in this art at the time of the invention to apply the teachings of Rink et al. to the Dinsdale et al. gas generator and have a gas generator with a solid propellant.

5. With regard to applicant's arguments directed to Dinsdale et al., please see the attachment to indicate the location of "an inner face of the outer housing" and "a wall" defining a distribution space.

6. Claims 7-12, 14, 16, and 18 are allowed.

7. Claims 15, 25-30, and 32-33 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen M. Johnson whose telephone number is 571-272-6877.

The examiner can normally be reached on Tuesday through Friday.

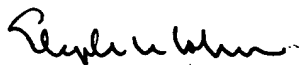
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Carone can be reached on 571-272-6873. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 800-786-9199.

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**STEPHEN M. JOHNSON**  
**PRIMARY EXAMINER**

Stephen M. Johnson  
Primary Examiner  
Art Unit 3641

SMJ

May 12, 2005

